

**Systems of Equations Worksheet 8**

Use substitution to solve each system of equations. Remember to write your answers as an ordered pair, i.e.  $(x, y)$ .

$$1. \begin{cases} 6x - 7y = 560 \\ y = x - 85 \end{cases}$$

$$2. \begin{cases} y = -x + 3 \\ x + 2y = -24 \end{cases}$$

$$3. \begin{cases} x - y = 34 \\ y = 6x - 184 \end{cases}$$

$$4. \begin{cases} y = -x - 18 \\ 6x - y = 130 \end{cases}$$

$$5. \begin{cases} 3x + 5y = 190 \\ y = x + 30 \end{cases}$$

$$6. \begin{cases} y = 2x + 80 \\ 5x + 4y = -252 \end{cases}$$

$$7. \begin{cases} 7x - 2y = 208 \\ y = 3x - 95 \end{cases}$$

$$8. \begin{cases} y = -\frac{5}{2}x + 82 \\ x - 7y = -315 \end{cases}$$

$$9. \begin{cases} y = x + 55 \\ x + 2y = 80 \end{cases}$$

$$10. \begin{cases} y = -x - 59 \\ 10x - y = -183 \end{cases}$$

$$11. \begin{cases} y = 6x + 282 \\ 3x - y = -156 \end{cases}$$

$$12. \begin{cases} 4x + 5y = -50 \\ y = 4x + 110 \end{cases}$$